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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

## Complete if Known

Application Number 09/767,680  
Filing Date 01-24-2001  
First Named Inventor Asger GEPPEL et al.  
Group Art Unit 1652  
Examiner Name Unassigned  
Attorney Docket Number 54337.000010

## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
KK	U1	5,075,226		Kaneko et al.	12-24-1991	
	U2					
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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
KK	F1		0430406	EP	Cresswell et al.	06-05-1991		
KK	F2		00/05342	WO	Duwat et al.	02-03-2000		
KK	F3		4036180	JP		02-06-1992		
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*Kathleen*

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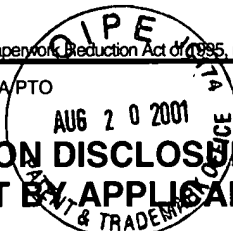
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KK	P1	Alicia Gil et al., "The cytochrome composition of the meat spoilage bacterium <i>Brochothrix thermosphacta</i> : identification of cytochrome <i>a<sub>3</sub></i> - and <i>d</i> -type terminal oxidases under various conditions", Arch Microbiol, 1992, 158:226-233	
↓	P2	Lena Winstedt et al., "Enterococcus faecalis V583 Contains a Cytochrome <i>bd</i> -Type Respiratory Oxidase, Journal of Bacteriology, July 2000, 182:3863-3866	

Examiner Signature	Kathleen Ka	Date Considered	12/17/02
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Sheet 2 of 3

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## NON PATENT LITERATURE DOCUMENTS

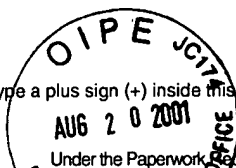
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.); date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
KK	P1	Database WPI, Week 199212, Derwent Publications Ltd., London, GB; AN 1992-092889, XP002137295 and JP 04 036180 A (Meiji Milk Products Co., Ltd) - English Abstract	
KK	P2	Tsutomu Kaneko <i>et al.</i> , Acetoin Fermentation by Citrate-Positive <i>Lactococcus lactis</i> subsp. <i>lactis</i> 3022 Grown Aerobically in the Presence of Hemin or Cu <sup>2+</sup> , Applied And Environmental Microbiology, Vol. 56, No. 9, Sept. 1990, p. 2644-2649	
	P3	T.W. Ritchey <i>et al.</i> , Distribution of Cytochrome-like Respiration in Streptococci, Journal of General Microbiology (1976), Vol. 93, No. 1, 195-203	
	P4	Antje Kaars Sijpesteijn, Induction of cytochrome formation and stimulation of oxidative dissimilation by hemin in <i>Streptococcus lactis</i> and <i>Leuconostoc mesenteroides</i> , Antonie van Leeuwenhoek, 36 (1970) 335-348	
	P5	Clacs von Wachenfeldt <i>et al.</i> , Molecular biology of <i>Bacillus subtilis</i> cytochromes, FEMS Microbiology Letters 100 (1992) 91-100	
	P6	Wilfred Chen <i>et al.</i> , Intracellular Expression of Vitreoscilla Hemoglobin Alters The Aerobic Metabolism Of Saccharomyces Cerevisiae, Biotechnology Progress, May/June 1994, 10, 308-313	
	P7	Jana M. Frustaci <i>et al.</i> , The <i>Escherichia coli</i> <i>visA</i> Gene Encodes Ferrochelatase, the Final Enzyme of the Heme Biosynthetic Pathway, Journal of Bacteriology, Apr. 1993, p. 2154-2156	
	P8	Neil R. Hackett <i>et al.</i> , Membrane Cytochromes of <i>Escherichia coli</i> Grown Aerobically and Anaerobically with Nitrate, Journal of Bacteriology, May 1983, p. 708-718	
	P9	Mats Hansson <i>et al.</i> , Cloning and Characterization of the <i>Bacillus subtilis</i> <i>hemEHY</i> Gene Cluster, Which Encodes Protoheme IX Biosynthetic Enzymes, Journal of Bacteriology, Dec. 1992, p. 8081-8093 vol. 174	
	P10	Chaitan Khosla <i>et al.</i> , Heterologous expression of a bacterial haemoglobin improves the growth properties of recombinant <i>Escherichia coli</i> , Nature Vol. 331, 18 February 1988 633-635	
	P11	Kiyoshi Kita <i>et al.</i> , Terminal Oxidases of <i>Escherichia coli</i> Aerobic Respiratory Chain, The Journal of Biological Chemistry, Vol. 259, No. 5, Issue of March 10, pp. 3375-3381, 1984	
	P12	Robert M. Lorence <i>et al.</i> , Potentiometric Analysis of the Cytochromes of an <i>Escherichia coli</i> Mutant Strain Lacking the Cytochrome <i>d</i> Terminal Oxidase Complex, Journal of Bacteriology, Vol. 157, No. 1, Jan. 1984, p. 115-121	
	P13	Michael J. Miller <i>et al.</i> , The Purification and Characterization of the Cytochrome <i>d</i> Terminal Oxidase Complex of the <i>Escherichia coli</i> Aerobic Respiratory Chain, The Journal of Biological Chemistry, Vol. 258, No. 15, Aug. 1983, pp. 9159-9165	
	P14	Shirley Y. R. Pugh, <i>et al.</i> , Growth of <i>Streptococcus faecalis</i> var. <i>zymogenes</i> on Glycerol: The Effect of Aerobic and Anaerobic Growth in the Presence and Absence of Haematin on Enzyme Synthesis, Journal of General Microbiology (1982), 1009-1017	
	P15	Isabel Sattler <i>et al.</i> , Cloning, Sequencing, and Expression of the Uroporphyrinogen III Methyltransferase <i>cobA</i> Gene of <i>Propionibacterium freudenreichii</i> ( <i>shermanii</i> ), Journal of Bacteriology, Vol. 177, No. 6, Mar 1995, p. 1564-1569	
V	P16	F.A. Skinner <i>et al.</i> , Streptococci, The Society of Applied Bacteriology Symposium Series No. 7, 1978	

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Sheet 3 of 3

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## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
KK	P17	Shigeru Taketani <i>et al.</i> , Structure and transcriptional regulation of the mouse ferrochelatase gene, GENE, 227 (1999) 117-124	
	P18	Dennis J. Worst <i>et al.</i> , Multiple haem-utilization loci in Helicobacter pylori, Microbiology (1999), 145, 681-688	
	P19	Alexander Bolotin <i>et al.</i> , Low-redundancy sequencing of the entire <i>Lactococcus lactis</i> IL1403 genome, Antonie van Leeuwenhoek 76: 27-76, 1999	
	P20	Takashi Morishita <i>et al.</i> , Production of Menaquinones by Lactic Acid Bacteria, 1999 J Dairy Sci 82:1897-1903	
KK	P21	<del>Standard Search Report from European Patent Office, completed May 10, 2000</del>	

Examiner Signature

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<b>LIST OF MATERIALS CITED BY APPLICANT</b> (Use several sheets if necessary)				INVENTOR'S NAME: Asger GEPPEL et al.		EXAMINER: Unassigned	
				FILING DATE: January 24, 2001		GROUP: 1652	

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KK B 4036180 (Abstract)	06-02-1992	JP			X		

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